



# CONNECTICUT SITING COUNCIL

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November 4, 2013

John Morissette
Project Manager - Siting
Northeast Utilities Service Company
P.O. Box 270
Hartford, CT 06141-0270

RE: DOCKET NO. 424 - The Connecticut Light & Power Company Certificate of Environmental Compatibility and Public Need for the Connecticut portion of the Interstate Reliability Project that traverses the municipalities of Lebanon, Columbia, Coventry, Mansfield, Chaplin, Hampton, Brooklyn, Pomfret, Killingly, Putnam, Thompson, and Windham, which consists of (a) new overhead 345-kV electric transmission lines and associated facilities extending between CL&P's Card Street Substation in the Town of Lebanon, Lake Road Switching Station in the Town of Killingly, and the Connecticut/Rhode Island border in the Town of Thompson; and (b) related additions at CL&P's existing Card Street Substation, Lake Road Switching Station, and Killingly Substation. Development and Management Plan for New 345-KV Transmission Lines and Related Minor Modifications to Adjacent Lines.

#### Dear Mr. Morissette:

At a public meeting of the Connecticut Siting Council (Council) held on October 31, 2013, the Council considered and approved the Development and Management (D&M) Plan submitted for the Connecticut portion of this project on August 30, 2013, for the new 345-kV transmission lines and related minor modifications to adjacent lines, with the following conditions:

- CL&P shall use syncopated silt fencing in project work areas around vernal pools.
- CL&P shall immediately notify the Council in any case when an environmental permit is issued to CL&P by a federal and/or state regulatory agency that contains a provision inconsistent with the record in Docket 424.
- CL&P shall provide the Council with a final report containing all agreements with abutters or other property owners regarding special maintenance precautions; significant changes to the D&M Plan that have been approved by the Council; locations of special planting and seeding; and actual construction cost of the project.
- CL&P shall comply with the notice and reporting requirements of § 16-50j-62 of the Regulations of Connecticut State Agencies.
- CL&P shall provide copies to the Council upon receipt of federal and state regulatory permits.



- CL&P shall provide to the Council a copy of the U.S. Army Corps of Engineers conveyance of the easement in the Mansfield Hollow area.
- CL&P shall submit to the Council mitigation strategies for National and State Registers of Historic Places sites prior to construction.
- Requests for any significant changes to the D&M Plan shall be approved by Council staff in accordance RCSA §16-50j-62(b).

This approval applies only to the D&M Plan submitted August 30, 2013. Any changes to the D&M Plan require advance Council notification and approval. Furthermore, the Certificate Holder is responsible for reporting requirements pursuant to Regulations of Connecticut State Agencies Section 16-50j-62.

Please be advised that changes that deviations from this plan are enforceable under the provisions of the Connecticut General Statutes § 16-50u. Enclosed is a copy of the staff report on this D&M Plan, dated October 31, 2013.

Thank you for your attention and cooperation.

Very truly yours,

Robert Stein Chairman

RS/CMW/laf

Enclosure: Staff Report, dated October 31, 2013

c: Parties and Intervenors

The Honorable Austin T. Tanner, First Selectman, Town of Brooklyn Chester Dobrowski, Zoning Enforcement Office, Town of Brooklyn The Honorable William H. Rose, IV, First Selectman, Town of Chaplin Demian Sorrentino, Zoning Enforcement Officer, Town of Chaplin The Honorable Carmen L. Vance, First Selectman, Town of Columbia Paul Stahl, Town Planner, Town of Columbia The Honorable Elizabeth Woolf, Chairman Town Council, Town of Coventry John Elsesser, Town Manager, Town of Coventry Eric M. Trott, Director of Planning & Development, Town of Coventry The Honorable Allan Cahill, First Selectman, Town of Hampton Martha Fraenkel, Zoning Enforcement Officer, Town of Hampton The Honorable Dennis Alemian, Chairman Town Council, Town of Killingly Bruce Benway, Town Manager, Town of Killingly Roget Gandolf, Zoning Officer, Town of Killingly The Honorable Joyce R. Okonuk, First Selectman, Town of Lebanon James Jahoda, Planning/Zoning Comm. Chrm., Town of Lebanon The Honorable Elizabeth Patterson, Mayor, Town of Mansfield Mathew Hart, Town Manager, Town of Mansfield Linda M. Painter, Director of Planning and Development, Town of Mansfield The Honorable James S. Rivers, First Selectman, Town of Pomfret Walter P. Hinchman, Planning and Zoning Chairman, Town of Pomfret The Honorable Larry Groh, First Selectman, Town of Thompson John E. Mahon, Jr., Zoning Enforcement Officer, Town of Thompson The Honorable Ernest S. Eldridge, First Selectman, Town of Windham Neel Beets, Town Manager, Town of Windham James E. Finger, Town Planner, Town of Windham

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Killingly Substation.	•	

# Development and Management Plan Interstate Reliability Project – New 345-kV Transmission Lines Staff Report

#### Introduction

On August 30, 2013, The Connecticut Light and Power Company (CL&P) submitted to the Connecticut Siting Council (Council) a Development and Management (D&M) Plan for the construction of the Connecticut portion of the Interstate Reliability Project (Interstate) transmission line, which extends through 11 towns in northeastern Connecticut from Card Street Substation in Lebanon, Lake Road Switching Station in Killingly, to the Connecticut/Rhode Island border in Thompson. The Connecticut portion of the approved Interstate consists of 36.8 miles of new 345-kV electric transmission lines aligned adjacent to the existing 345-kV overhead transmission lines that presently occupy existing CL&P rights-of-way. The D&M Plan was submitted consistent with the Council's Decision and Order (D&O) dated December 27, 2012.

This D&M Plan includes construction activities for the new 345-kV transmission lines and related modifications to adjacent 345-kV, 115-kV, and 69-kV transmission lines as well as distribution lines presently within the rights-of-way (ROWs) to be used for Interstate. The new 345-kV lines will be within CL&P's pre-existing easements, with the exception of an approximately five-acre easement expansion across approximately 1.4 miles of federally-owned lands in Mansfield and Chaplin (referred to as the Mansfield Hollow area). CL&P is now in the process of finalizing the acquisition of the approximately five acres of easement from the U.S. Army Corps of Engineers (USACE).

#### Permits and consultations

CL&P received Connecticut Department of Energy and Environmental Protection (CT DEEP) permits, including:

- 1. The CT DEEP General Permit for the Discharge of Stormwater and Dewatering Wastewaters Associated with Construction Activities for the management of discharge of stormwater and dewatering wastewaters from construction sites; and
- 2. The CT DEEP Stream Channel Encroachment Line Permit and Section 401 Water Quality Certification for Interstate, issued May 7, 2013.

CL&P has applied to the USACE for a Section 404 Clean Water Act Compliance with National Historic Preservation Act (NHPA), Section 106.

During the preparation of this D&M Plan, CL&P consulted with representatives of the 11 municipalities traversed by the 345-kV transmission lines and with state and federal agencies, including USACE, CT DEEP, the State Historic Preservation Office (SHPO), and the Connecticut Department of Agriculture.

CL&P also contacted property owners along the transmission line ROWs, including lessees of active farmlands.

#### Municipal and other public consultations

In mid-May 2013, CL&P mailed a postcard to residents and businesses along and near the project route that invited them to participate in the D&M Plan review process.

On June 3-4, 2013, CL&P provided the draft D&M Plans to the Chief Elected Officials (CEOs) of all municipalities along the Interstate transmission line route and all parties and intervenors of the Docket 424 proceeding. CL&P invited written comments from the CEOs and other town officials.

In May and June 2013, CL&P met with town officials for each of the 11 towns crossed by the project and with targeted stakeholders, to review the D&M Plans.

CL&P held two public review sessions on June 12 and June 13, 2013 in Mansfield and Brooklyn, respectively. The public review sessions were designed to solicit public input regarding the draft D&M Plans. Information about the public review sessions were sent to landowners adjacent to the stations and project route. Additionally, notifications were posted on the project website, in local newspapers, and issued to the media via a press release. Also, signs were placed at the meeting facility on the day of the event.

CL&P received comments on the project from the public, either at the public review sessions in Mansfield and Brooklyn or during the associated comment period. The Towns of Mansfield and Coventry also provided comments on the project. Most comments were regarding property-specific concerns, such as the disposition of wood removed in tree clearing, long-term ROW vegetation management, farmland soil preservation, and construction access roads. The Town of Mansfield's comments included issues such as the minimization of impacts to businesses, protection of stone walls, protection of active farmland, the schedule for ROW restoration, and coordination regarding construction activities across town open spaces, public trails, and Mansfield Hollow State Park and Wildlife Management Area (WMA). The Town of Coventry's comments pertained to transmission line design and location over property at 199 Flanders River Road.

#### Community outreach during the construction process

CL&P has conducted community outreach during the project planning and siting processes. The company will continue its outreach efforts throughout construction and will notify affected stakeholders of upcoming construction activities.

CL&P has established a project hotline (1-866-99-NEEWS) and a dedicated email address for communications with residents, businesses and other stakeholders throughout construction. CL&P has also established a project website (<a href="www.NEEWSprojects.com">www.NEEWSprojects.com</a>) to provide an overview of the project, a map of the project facilities, a project fact sheet, and CL&P contact information. After construction begins, the project website will also include regular town-by-town construction updates.

CL&P will hold briefings with landowners most affected by construction of the project and other stakeholders to provide updates on the construction progress, milestones and timelines. Project representatives will also contact adjacent landowners to discuss construction activities and questions or concerns.

#### Negotiations related to the Mansfield Hollow Area

CL&P negotiated with the USACE for the expansion of its ROW in the Mansfield Hollow Area, which consists of Mansfield Hollow State Park, Mansfield Hollow Lake, and Mansfield Hollow Wildlife Management Area (WMA) and is leased to and managed by CT DEEP.

CL&P currently has a 150-foot ROW on the federal property across 0.9 miles in Mansfield (which includes Mansfield Hollow State Park and WMA) and 0.5 miles in Chaplin (which includes the WMA). To accommodate Interstate, CL&P proposed to expand the easement on federal property by 25 feet to the north in Mansfield (2.6 acres) and by 35 feet to the north in Chaplin (2.4 acres), totaling approximately 5 acres.

The new 345-kV transmission lines will be on steel monopoles with vertically arranged conductors located north of the existing 345-kV line.

Following analysis of the project, the USACE issued a signed Finding of No Significant Impact on February 5, 2013, endorsing the five acre easement expansion. The USACE is preparing documentation for the conveyance of the additional 5-acre easement to CL&P.

#### Negotiations related to the Hawthorne Lane shift

CL&P finished negotiations with private landowners in the Hawthorne Lane area in Mansfield. The landowners granted CL&P new easement rights to allow a shift in the ROW that will place the new and existing transmission lines farther from four of the homes in the area.

#### Schedule

Construction activities are expected to begin in the first quarter of 2014 and be completed by the end of 2015. Restoration activities will likely continue into 2016. Project construction will require some line outages of existing transmission and distribution lines on the project ROWs. Line outages must be coordinated with and approved by the Connecticut Valley Electric Exchange (CONVEX).

Construction work hours will typically be over a 10-hour period between 7:00 a.m. and 7:00 p.m., six days per week (Monday through Saturday). However, certain activities may require work outside of the typical construction hours, in some cases on a 24-hour basis and/or on Sundays. Such non-typical work includes activities that must be performed during a CONVEX-approved outage.

#### **Construction**

Interstate transmission lines will be placed adjacent to existing transmission lines. Most of the new 345-kV line conductors will be horizontally arranged and supported by multi-pole steel-pole structures (H-frame family). Steel monopole structures will be used in certain locations, including, but not limited to, Highland Ridge Golf Range, the Hawthorne Lane and Mansfield Hollow Areas in Mansfield, between

Lake Road Junction and Lake Road Switching Station in Killingly, and at several right-of-way (ROW) angles where the line conductors will be supported in vertical or delta configurations.

CL&P will require construction field offices, contractor yards, and staging areas for the construction of the new 345-kV transmission lines. The Interstate construction contractor will be responsible for identifying proposed locations for such areas, and for entering into agreements with the property owner for use during construction. CL&P proposes submitting the locations of these construction support areas to Council staff for review and approval prior to use. Staff recommends that the Council grant staff the authority to review and approve the locations of the construction support areas.

#### Active Farmlands

Consistent with Condition 3(r) of the D&O, CL&P identified areas of active farmland along project ROWs and off-ROW access roads and consulted with the property owners and lessees of active farmlands to discuss protection measures for agricultural soils.

The primary areas of concern of the farmers included:

- 1. The proposed locations of and improvements to construction access roads;
- 2. Topsoil preservation; and
- 3. The potential effects of the construction schedule on cropland use.

CL&P will implement measures to protect active farmlands during construction and restore any temporarily affected farmlands to productive farmland use after the completion of construction. CL&P will follow its existing guidelines regarding transmission line ROW activities in agricultural lands, which includes scheduling, restoration of disturbed or compacted soils, soil preservation and erosion controls, excess soil removal, ROW restoration, and addressing damage to property or other losses.

#### Wetlands and Watercourses

The new 345-kV transmission lines will span 104 watercourses, including the Tenmile River, Hop River, Willimantic River, Mansfield Hollow Lake, Quinebaug River, and Fivemile River. No new transmission line structures will be located within waterbodies or watercourses; however the project construction will require temporary construction access, permanent culverts, and replacement of existing culverts.

Work within wetlands includes the removal of approximately 48 acres of forested vegetation within the new 345-kV conductor clearance zones and as otherwise required for construction, the installation of temporary access roads and work pads where no upland alternatives exist, and installation of permanent access roads and new transmission line structures where no upland alternatives are available.

CL&P has provided a Wetland Invasive Species Control Plan (WISCP) to avoid or minimize the potential for the spread of invasive plant species in wetlands affected by construction of the project. The overall goal of the WISCP is to protect the ecological conditions of wetlands within CL&P's Interstate ROWs by minimizing the spread of invasive plant species within affected wetlands and avoiding the introduction of invasive plant species in wetlands where they do not already occur. In areas where invasive species are identified, measures will be implemented such as cleaning of equipment and any other materials (including swamp mats) to eliminate excess soil, debris, and vegetation before being mobilized into the project ROWs; installation of timber mats for clearing and construction of access roads; construction equipment and excavated soil from wetlands will be contained within the wetland work area boundaries;

and excavated soil from wetlands or riparian areas containing target invasive plants will be stockpiled separately and contained.

Along project ROWs are 88 vernal pools and 29 amphibian breeding habitats. While no new transmission structures will be located within vernal pools, improvements to four existing on-ROW access roads will affect vernal pools. The project is designed to minimize or avoid work in amphibian breeding habitat areas where possible. However, some habitats are large and extend linearly along the ROWs and cannot be avoided.

CL&P has provided an Avoidance and Minimization Protocol for Vernal Pools. This protocol identifies vernal pools and the construction activities that may directly or indirectly affect them. CL&P has designed Interstate so that no new transmission line structures will be located directly in vernal pools along the project ROWs; however a number of work pads and temporary and permanent access roads must be placed in vernal pools or in wetlands that contain cryptic vernal pools. Measures to avoid or minimize impact to vernal pool breeding habitats during construction include:

- 1. Avoiding access through vernal pools, as practicable, during vegetation clearing. Where access through vernal pools is unavoidable, low-impact clearing techniques would be used and/or work during frozen ground conditions would be considered;
- 2. Trees that are removed from the project ROW will not be intentionally felled into vernal pools;
- 3. Maintaining existing scrub-shrub vegetation within 25 feet of vernal pools, except where access roads and work pads must be installed;
- 4. Leaving in place low-growing vegetation that must be removed adjacent to vernal pools to serve as recruitment for leaf litter and coarse woody debris;
- 5. Installing and maintaining erosion and sedimentation controls along construction access roads and around work pads to protect water quality to limit the potential for soil deposition into vernal pools;
- 6. Using swamp mats or corduroy roads if practicable where improvements to on-ROW access roads through vernal pools are required;
- 7. Scheduling vegetation clearing and installation of access roads in and around vernal pools so it does not interfere with amphibian breeding and migration seasons;
- Implementing measures to facilitate unencumbered amphibian access to and from vernal pools
  when activities must occur within and around vernal pools during amphibian migration periods;
  and
- 9. Removing erosion and sedimentation devices promptly upon final re-vegetation and stabilization of the ROW.

In Putnam, approximately 3.3 acres of the ROW are located within a Level A Aquifer Protection Area (APA). Two new structures will be placed in the APA area, but three new structures will be located adjacent to the edge of the APA. To avoid or minimize potential spills in the APA, vehicle maintenance, storage, and refueling will be performed a minimum distance of 100 feet from the APA, to the extent practicable. For any emergency maintenance, storage or refueling of equipment within 100 feet of the APA, the construction contractor will be required to use appropriate secondary containment devices. Additionally, each construction vehicle will be required to have a spill kit with materials able to absorb up to five gallons of liquid.

#### Rare and endangered species

The eastern ribbon snake, a state-listed Species of Special Concern, is located in wet sedge meadows and upland edges of ponds and streams. This species may be located along sections of the ROW in Chaplin,

Hampton, Killingly and Putnam. The construction field personnel will be informed regarding identification of the eastern ribbon snake and its habitat; and procedures to follow should the species be found in an active work area.

The eastern hognose snake, a state-listed Species of Special Concern, is found in woodlands with sandy soil, fields, and farmland. This species has habitat along portions of the ROW in Mansfield. The construction field personnel will be informed regarding identification of the eastern hognose snake and its habitat; and procedures to follow should the species be observed in an active work area.

The aquatic snail, a state-listed Species of Special Concern, is found in inland bodies of fresh water. This species may be found along portions of the ROW in Mansfield near Mansfield Hollow Lake. CL&P will inform construction contractors regarding the need to adhere to erosion and sedimentation control requirements to minimize potential for sediments to reach Mansfield Hollow Lake during construction. Also, a minimum 25-foot buffer along the shoreline of Mansfield Hollow Lake will be established and maintained. Within the buffer, tree and shrub species capable of growing to heights of greater than 30 feet will be removed; however, all other vegetation removal will be minimized to the extent practicable.

The moustached clubtail dragonfly, a state-listed Threatened species, is found in habitat with cold-water rivers with gravelly or rocky bottoms. While this species may be found near portions of the ROW in Chaplin near the Natchaug River, project construction is not expected to directly impact the river. CL&P will inform construction contractors regarding the need to adhere to erosion and sedimentation control requirements to minimize potential for sediments to reach the Natchaug River. Also, a minimum 25-foot buffer along the banks of the Natchaug River will be established and maintained. Within the buffer, tree and shrub species capable of growing to heights of greater than 30 feet will be removed; however, all other vegetation removal will be minimized to the extent practicable.

The brook floater, a state-listed Threatened species, and the eastern pearlshell mussel, a state-listed Species of Special Concern, are both found in the habitat of the Natchaug River. While these species may be found near portions of the ROW in Chaplin near the Natchaug River, project construction is not expected to directly impact the river. CL&P will inform construction contractors regarding the need to adhere to erosion and sedimentation control requirements to minimize potential for sediments to reach the Natchaug River. Also, a minimum 25-foot buffer along the banks of the Natchaug River will be established and maintained. Within the buffer, tree and shrub species capable of growing to heights of greater than 30 feet will be removed; however, all other vegetation removal will be minimized to the extent practicable.

# Lepidoptera

Lepidoptera (moths and butterflies) species identified along the CL&P ROWs include:

- 1. Burgess cutworm Special Concern
- 2. Frosted elfin Threatened
- 3. Sleepy duskywing Threatened
- 4. Persius duskywing Endangered
- 5. Scrub euchlaena Special Concern
- 6. Eucoptocnemis fimbriaris (no common name) Special Concern
- 7. Slender clearwing Threatened
- 8. Buck moth Endangered
- 9. Barrens metarranthis Endangered
- 10. Scribbled sallow Special Concern

Five plant communities and host plant species that support the lepidoptera populations are:

- 1. Bluestern grassland
- 2. Low bush blueberry
- 3. Scrub oak
- 4. Wild indigo
- 5. Bluestem-scrub oak-low bush blueberry mosaic

Site specific mitigation measures will be implemented at two locations during construction, including:

- 1. between existing Structure 9258 west of the Quinebaug River in Putnam and existing Structure 9273 northeast of Park Road in Putnam; and
- 2. between existing Structure 9323 northeast of Elmwood Hill Road in Thompson and the Connecticut/Rhode Island border.

The project will have a long-term beneficial impact on the moth and butterfly species that use scrub-shrub habitat because of the increase in scrub-shrub area due to the construction and management of the new 345-kV transmission lines. Also, CL&P intends to implement measures to avoid and minimize impacts to the host plants and host plant community associations during construction and to promote plant habitat during ROW management in the future.

Short-term construction measures will be implemented to minimize temporary, short-term impacts to host plants and plant community associations include minimizing mowing and ground disturbance outside the areas required for safe completion of vegetation removal and construction. Also, CL&P will inform construction contractor personnel of the approximate boundaries of host plants and the plant community associations. Additionally, the boundaries of the host plant and plant community associations will be flagged by CL&P's Environmental Inspectors prior to commencement of construction activities.

Future management measures for the preservation of the above mentioned plant species include identifying scrub oak as a compatible ROW species so it is not removed during future ROW management activities. The other host plant species are shrub or grassland species that are already compatible with ROWs. Additionally, the management of invasive species is a measure that will conserve and promote host plant populations.

#### Public trails and recreational areas

The new 345-kV transmission lines will cross several public trails and recreational areas. CL&P has or will consult with the owners and managers of each recreational and open space property crossed by Interstate to minimize disruptions to the public while maintaining public safety.

In Mansfield Hollow State Park and WMA, CL&P intends to install construction warning signs along Bassetts Bridge Road near the ROW, and along hiking trails; creating hiking trail detours, and using fencing around work sites, as necessary. Forested vegetation along federal properties in the Mansfield Hollow area will be removed between August 1 and April 1, outside of the typical bird nesting season, to the extent possible.

In the project area near Mansfield Hollow Lake, in accordance with CT DEEP's 401 Water Quality Certification for the project, CL&P will install "tree drops" along both sides of the lake shoreline along the ROW. Tree drops involves submerging felled trees and securing them to the lakeside using either a hinge-cut technique or by direct anchoring to create and enhance in-lake habitats for resident fish

populations. CL&P will coordinate with CT DEEP Inland Fisheries staff at least 14 days prior to and during this work.

#### Cultural Resources

CL&P's consultants have coordinated with the Office of State Archaeology, which represents the SHPO, and conducted surveys of the transmission line ROWs. Various archaeological sites and features determined to be of importance were identified.

Sites that are eligible for the National or State Registers of Historic Places (NRHP/SRHP) will be avoided or protected, if possible. If any NRHP/SRHP eligible sites cannot be avoided or protected, CL&P will create mitigation strategies developed in consultation with the Office of State Archaeology, as applicable.

Since the locations of cultural resources are sensitive, they will only be provided to the Office of State Archaeology through a separate *Historic Resources Management Plan*.

Part of the construction contractor's required environmental training will be procedures for generally identifying and protecting cultural resources.

#### Access roads

On-ROW access roads will be primarily used during construction. In some areas, off-ROW access roads will be necessary to avoid rugged terrain or sensitive environmental or cultural resources. CL&P has initiated discussions with private landowners regarding the use of off-ROW access roads.

Typically, new permanent access roads will not be located across active farmlands, within 100-year floodplains or floodways, on residential properties, within state-designated threatened and endangered species habitat, or sensitive cultural resource areas. Following construction of the project, access roads will be left in place in upland areas only if CL&P obtains landowner approval.

This project also includes the installation of guy-wire and anchor relocations and ground wire additions on some of the existing transmission structures on the ROW; the addition of a new pole on the existing 69-kV transmission line in Columbia; and the relocation of several poles of an existing distribution line in Putnam to maintain clearance from the new 345-kV line conductors.

#### FAA notice of presumed hazard structures

The Windham Airport in Willimantic is 3,700 feet away and the Danielson Airport in Killingly is 2,850 feet away from segments of the project's ROW. In CL&P's consultation with the Federal Aviation Administration (FAA), it identified nine structures near the Windham Airport and 11 structures near the Danielson Airport that may require mitigation measures to improve visibility to air traffic. Mitigation measures are currently being reviewed by the FAA and may include using lights and/or marking on the new structures and marker balls on the shield wires. The FAA also issued Notices of Presumed Hazards (NPH) for several existing line structures near both airports.

#### **EMF Monitoring Plan**

Consistent with the Council's D&O, CL&P has submitted an Electric and Magnetic Field Monitoring Plan for Interstate. Electric and magnetic field (E & MF) measurements are made near transmission lines

to make comparisons to levels predicted by calculations. CL&P chose several E & MF measurement locations including a minimum of one readily accessible monitoring location for each new 345-kV overhead line configuration along the ROW of each new 345-kV line as well as locations along sections of the route where 69- or 115-kV lines share the ROW; and measurements on an continuous path along the perimeter fence of Card Street Substation. E & MF measurements will be recorded at a height of one meter above ground level, consistent with international protocol.

Within 12 months of the in-service date of the new 345-kV lines, CL&P will submit a report to the Council containing the results of the measurements with "true-up" comparisons to predicted values. CL&P's report will also include aerial photographs (at 1 inch = 100 feet) to mark each measurement location.

#### **Hawthorne Lane ROW Shift**

CL&P's existing 300-foot ROW extends across Hawthorne Lane in Mansfield, as well as four driveways extending from Hawthorne Lane to homes. CL&P had originally proposed to locate the new 345-kV line north of the existing 330 Line, which would have required the removal of existing vegetative screening between some of the homes on Hawthorne Lane and the electric transmission lines. The owners of the four Hawthorne Lane homes negotiated a ROW shift with CL&P that will allow the ROW, with the existing and new electric transmission lines, to be shifted south away from the four homes.

Two existing 330 Line structures will be removed from the ROW and the lines will be relocated to the new ROW where the 330 Line conductors will be supported by steel monopoles in a vertical configuration. One new steel-monopole will be needed to support the new 345-kV line in a vertical configuration north of the relocated 330 Line.

#### Mount Hope Montessori School Landscaping

On April 11, 2013, CL&P met with officials of the Mount Hope Montessori School to discuss the design of vegetative screening. CL&P and the school agreed to a plan that would install a combination of tall-growing evergreen and deciduous species mostly on the school's property. Some smaller-growing arborvitaes will be placed on the edge of CL&P's property, outside of vegetation limits to maintain conductor clearances. CL&P will plant approximately 8-foot evergreen trees and 12 to 14-foot red maples on the school property, which CL&P will warranty for two-years. The plantings are expected to be installed prior to the commencement of transmission line construction activities near the school.

# **Independent Environmental Inspector**

On September 19, 2013, the Council approved BSC Group as the independent environmental inspector for construction of the Interstate facilities. This inspector will monitor construction of the new 345-kV transmission lines, related modifications, and station modifications, including restoration. The inspector will provide a bi-weekly monitoring report to the Council with copies to the Chief Elected Officials, or representatives, of the municipalities traversed by the project. Additionally, the inspector will coordinate with CL&P's environmental compliance team and will have the authority to stop construction practices that are inconsistent with the Decision and Order or approved D&M Plans or that may cause significant environmental impact that is not otherwise approved in the D&O or Interstate environmental permits.

#### **Vegetative Clearing**

The vegetation within managed portions of transmission line ROWs, typically consist of shrubs and small trees that are less than 20 feet in height, and herbaceous species. Outside of the managed portions of the ROWs, vegetation consists predominantly of mixed deciduous forest, farmlands, open fields, and low-growing vegetative communities.

Construction of the project will require vegetation removal along the ROW to allow the installation of the new 345-kV lines, to provide and maintain access to transmission line structures, and to provide safe distances between the conductors and woody vegetation. CL&P provided a Vegetation Clearing Plan to describe vegetation clearing that will be performed during project construction to ensure compliance with established minimum vegetation clearances when operating the new transmission lines.

Vegetative clearing will occur along the portions of the ROW to be used for construction of the new transmission lines and in areas of tall-growing woody species that could interfere with the operation of the proposed transmission lines. Mechanical methods will be used for clearing.

Along stream banks and within wetlands, low-growing vegetation will be maintained to the extent practicable. Near streams, vegetation removal will be performed selectively, preserving desirable vegetation within a 25-foot-wide riparian zone on either side of the stream bank. In wetlands, vegetation clearing will be conducted to minimize rutting.

Vegetation removal in and around vernal pool habitats will be limited to the extent practicable. In locations where access across vernal pools is unavoidable, lower impact clearing techniques and/or temporary swamp mats, corduroy roads, or equivalent will be used to support vehicles and equipment. CL&P will attempt to schedule clearing activities to not interfere with amphibian breeding and migration seasons, when circuit outage and other construction timing constraints allow. CL&P will also consider work during frozen ground conditions, if construction and/or transmission line outage schedules allow.

Trees to be removed will be analyzed for potential uses such as lumber, firewood, mulch, or biomass chips. Wood will be left for landowners within the transmission line corridor who indicate they wish to use it. It will be up to the contractor to determine what to do with wood not wanted by landowners.

A danger tree is one that could damage the transmission structures or conductors if it fell toward the transmission lines. A hazard tree is one that exhibits a defect or damage that increases the risk of it falling into the transmission lines. During and after construction of the project, danger and hazard trees will be identified and removed or pruned as necessary. CL&P will inform the landowner prior to the removal of any off-ROW danger and hazard trees.

## Spill Prevention and Countermeasures Plan

As part of its D&M Plan, CL&P submitted a Spill Prevention and Countermeasures Plan (SPCP). The SPCP describes measures to minimize potential for a spill of petroleum products or hazardous or toxic substances and, if a spill does occur, to contain the release of the spill and minimize effects.

# **Snow Removal and De-Icing Procedures**

Project construction will occur over a two-year period including winter, when ice and snow may occur. Ice and snow removal may be necessary to allow construction to proceed safely and will be performed to protect the environment.

Snow disposal sites will only be located in upland areas. For the project transmission line ROWs, procedures for snow removal include careful removal of snow from access roads and crane pads and disposal in dump trucks or approved locations; careful removal of snow along access roads and crane pads in and near wetlands and waterbodies; and prohibition on plowing snow into any restricted access areas or other environmentally-sensitive areas as shown in the D&M Plan maps. If soil or erosion controls are damaged during the snow removal and/or stockpiling process these controls will be promptly repaired.

#### **D&M Plan Changes**

All D&M Plan changes that are deemed "significant" in accordance with RCSA § 16-50j-62, will be submitted to the Council for approval prior to implementation of the change. A significant change to the project is one that would substantially reduce environmental protection, substantially increase potential public concern, or result in a meaningful effect on the environment, the public, or other project permits and approvals.

Significant change to the D&M Plan will be categorized as either "urgent" or "non-urgent." If a change is deemed urgent, and it cannot wait until the next Council meeting for consideration, CL&P will provide verbal notification of the change to Council staff and request expeditious approval of the change. If verbal permission is granted, CL&P will continue construction as stated in the approved change and file documentation regarding the change with 48 hours. If verbal permission is not granted or if the change is not urgent, CL&P will file documentation regarding the change and hold construction on that portion of the project until the Council reviews the change.

Non-significant changes to the D&M Plan will be documented. Although changes that are not deemed significant will not submitted to the Council for approval, CL&P will document all changes in its monthly construction progress reports.

Council staff recommends that approval of future requested significant changes to the approved D&M Plan be delegated to Council staff in accordance with Section 16-50j-62(b). In accordance with that section, if advance written notice is impractical, the Certificate Holder shall provide verbal notice of the changes and shall submit written specifications to the Council within 48 hours after the verbal notice. All changes pursued without advance notification and approval shall be subject to a penalty, enforceable by the Attorney General pursuant to C.G.S. §16-50u.

#### Reports

The following reports will be provided to the Council:

1. A Monthly Construction Progress Report: As required by RCSA § 16-50j-62(b)(3), this report will identify changes and deviations to the approved D&M Plan.

- 2. A Bi-Weekly Independent Environmental Inspector Report: As required by the D&O condition 8, this report will be provided to the Council and the Chief Elected Officials of each involved town (or their designated representatives) and will describe the status of construction and environmental protection.
- 3. A **Final Report**: As required by RCSA § 16-50j-62(c), CL&P will provide this report to the Council no later than 180 days after completion of all site construction and rehabilitation. The report will identify:
  - a) All agreements with abutters or property owners regarding special maintenance precautions
  - b) Significant D&M Plan changes that were necessary because of property rights or underlying and adjoining owners or for other reasons.
  - c) The location of any construction materials left in place.
  - d) The location of areas where special plantings and reseeding have been performed.
  - e) The actual construction cost of the facility.
- 4. An **Operating Report**: As required by the D&O condition 9, CL&P will provide this report to the Council within three months after the conclusion of the first year of the operation of all project facilities, and annually thereafter for three years. The report will describe the overall condition, safety, reliability, and operation of the transmission systems.

#### Recommendations

Council staff recommends approval of the Interstate D&M Plan for the new 345-kV transmission lines and related minor modifications to adjacent lines, with the following conditions:

CL&P shall use syncopated silt fencing in project work areas around vernal pools.

CL&P shall immediately notify the Council in any case when an environmental permit is issued to CL&P by a federal and/or state regulatory agency that contains a provision inconsistent with the record in Docket 424.

CL&P shall provide the Council with a final report containing all agreements with abutters or other property owners regarding special maintenance precautions; significant changes to the D&M Plan that have been approved by the Council; locations of special planting and seeding; and actual construction cost of the project.

CL&P shall comply with the notice and reporting requirements of § 16-50j-62 of the Regulations of Connecticut State Agencies.

CL&P shall provide copies to the Council upon receipt of federal and state regulatory permits.

CL&P shall provide to the Council a copy of the USACE conveyance of the easement in the Mansfield Hollow area.

CL&P shall submit to the Council mitigation strategies for NRHP/SRHP sites prior to construction.

Requests for any significant changes to the D&M Plan shall be approved by Council staff in accordance RCSA §16-50j-62(b).

# STATE OF CONNECTICUT

### CONNECTICUT SITING COUNCIL

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#### NOTICE OF SERVICE

I hereby affirm that a photocopy of this document was sent to each Party and Intervenor on the service list dated October 4, 2012, with method of service to each party and intervenor listed via e-mail and U.S. mail on November 4, 2013.

Dated: November 4, 2013

Lisa Fontaine

Custodian of Docket No. 424

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